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Bookstart Treasure Implementation Study: A Book-gifting Programme for Pre-school Children

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Bookstart Treasure

Implementation Study



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Queen's University
Belfast

Bookstart Treasure Implementation Study: A Book-gifting Programme for Pre-school Children

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Executive summary

Background

Booktrust programmes seek to foster a love of reading in children and their families. Booktrust Treasure is a bookgifting programme delivered in pre-school and early years settings. The primary intended outcomes of the programme are increased family enjoyment of reading and sharing books. The following study explored the implementation quality of Bookstart Treasure and how this was associated with family reading outcomes.

Methodology

The research design of this project was a survey of parents and pre-school practitioners participating in Bookstart Treasure in the Belfast Education and Library Board (BELB) in NI. A stratified random sample of 40 pre-school settings was chosen based on the number of voluntary and statutory settings in the BELB. A paper based survey was distributed to all parents and practitioners in these settings.

Findings

What are family's general reading behaviours with their pre-school child?

- 97.6% of the families read to their child weekly or daily
- There was no dominant reason which prevented parents reading to their children.
- 35% of participating parents pre-school children were not members of the library

What is the level of family enjoyment and usage of the Bookstart Treasure programme?

- Of the 310 families responding: 298 had used the pack (96.1%); 12 had not use the pack (3.9%)
- 93.6% of families reported using the packs 'sometimes' or 'often'
- 97.3% of children and 85.5% of parents enjoyed using the Treasure packs
- 75.5% of parents agreed or strongly agreed that the Treasure Pack encouraged them to read with their child more often
- 87.2% of families explored the Treasure Pack books through talking and/or using other resources

What are practitioners' implementation practices for the Bookstart Treasure programme?

- 71.8% of setting staff talked to parents about the benefits of sharing books with their child
- 40.5% of settings simply gave pack to children to take home
- 26.7% of setting staff gave out the pack with no specific guidance

What are practitioners' perceptions of the Bookstart Treasure programme?

- 91.5% of staff are glad they gift the pack
- 89.0% think the packs are beneficial for children
- 87.7% of pre-school staff want the programme to continue in the future

What are practitioners' views on programme outcomes for children?

- The main perceived outcome of the Bookstart Treasure is children being exposed to books in a fun and creative way (76.3% strongly agreed)
- 86.4% of pre-school staff thought Bookstart Treasure helped promote equality of access to reading and literacy
- There is relatively more uncertainty about the packs impact on bonding and wellbeing

What are practitioners' views on programme outcomes for parents?

- 87.5% of pre-school staff agreed that the Treasure Pack provided a fun way for the parent/carer to engage with their child
- 83.8% of pre-school staff agreed that the Treasure Pack increased access to books

Do implementation practices and programme perceptions vary across setting type (statutory vs voluntary)?

The results suggested that there is no difference in 'implementation practice' and 'practitioner perceptions' between voluntary and statutory settings for Bookstart Treasure.

Does implementation practice have an impact on family enjoyment and usage of the Bookstart Treasure programme?

The analysis showed higher quality implementation was related to increased overall family enjoyment and usage of the Bookstart Treasure programme. The analysis also suggested that parents with lower levels of education reported enjoying and using the packs more than those with higher levels of education. This was the case regardless of their child's gender, what type of setting the packs were gifted in, and even how well the programme was implemented.

Conclusions

The findings reveal strong perceptions among practitioners that the intervention is having a positive effect on a wide range of family reading outcomes. Whilst this is a positive finding in relation to programme implementation, it is important to note that this does not, in itself, constitute evidence that Bookstart Treasure is having a positive effect. Unfortunately, measuring programme effectiveness was not possible within this implementation study.

With regard to delivery, the programme was found to be equally well delivered in both voluntary and statutory settings. There is also some evidence that higher quality programme implementation is associated with increased enjoyment and usage of the packs amongst families. Whilst encouraging, it is important to note that it cannot be concluded from this that higher levels of implementation have a direct effect on these family outcomes. Furthermore, the findings also provide some evidence that parents with lower levels of education enjoy and use the packs more than their counterparts with higher levels of education.

Recommendations

- Booktrust should provide implementation guidelines, based on best practice, to the practitioners in early year's settings when distributing the packs. This could improve and standardise the quality of implementation, which has been shown to be related to parents' enjoyment and usage of the packs.
- Booktrust should explore the relationship between low parental levels of education and the increased enjoyment and usage of the programme. There may be opportunity to use the programme as a catalyst for engaging parents with low levels of education in their child's education.

Background

Booktrust deliver 25,000 Bookstart Treasure packs each year to every child in pre-school settings in Northern Ireland. The optimum delivery of these packs includes pre-school practitioners inviting parents into a setting, gifting the packs and modelling good shared reading principals for parents. Booktrust NI is aiming to position its work within the Department of Education's current initiative 'Education Works' where parents are seen as the first teacher in children's lives. Therefore, Booktrust programmes try to foster a love of reading in children and their families. Thus the primary intended outcomes of the programme are increased family enjoyment of reading and sharing books.

There is a growing research base around book gifting and Booktrust have a substantial track record in research and development in the area (see <http://www.bookstart.org.uk/research/bookstart/> for more details). There is also a growing body of work evaluating the effectiveness of book gifting programmes using Randomised controlled trials. The results of these trials have been mixed but an RCT evaluation has shown significant effects of book-gifting on parental attitudes towards reading (O'Hare & Connolly 2014). There has been less systematic work around book-gifting implementation (positioned within the field of implementation science - see Fixsen, et al. 2009). Implementation science is concerned with key issues such as service fidelity (or consistency of programme delivery), service dosage (or level of programme exposure), quality (i.e., programmes being evidence informed) and engagement (i.e., programmes being well received and enjoyed by all stakeholders). This study focused on the research area of implementation (programme exposure and engagement etc.) rather than programme effectiveness¹.

Research Questions

The major research questions in this project were:

1. What were family's general reading behaviours with their pre-school child?
2. What was the level of Family enjoyment and usage of the Bookstart Treasure programme?
3. What were practitioners' implementation practices and perceptions of the Bookstart Treasure programme?
4. What were practitioners' views on potential programme outcomes?
5. Did implementation practices and practitioner perceptions of Bookstart Treasure vary across setting type (statutory vs voluntary)?
6. Was implementation quality related to family enjoyment and usage of the Bookstart Treasure programme?

¹ This type of research would require the use of a control group.

Methodology

Design

The research design of this project was a survey of parents and pre-school practitioners participating in the Bookstart Treasure programme in the Belfast Education and Library Board (BELB) in NI.

Sample

A stratified random sample of 40 pre-school settings was chosen based on the number of voluntary and statutory settings in the BELB.

A paper based survey was distributed to both parents and practitioners in these settings.

- The total number of Parent surveys distributed was 1350 with 382² surveys returned (28%). The gender of the pre-school children in the sample was 187 boys and 188 girls.
- Practitioner surveys were returned from 32 of the 40 settings that had been included in the study (80%). A total of 82 staff returned questionnaires (40 voluntary and 42 statutory staff) within these 32 settings.

Parental Questionnaire

Parents of children in 40 pre-school settings received a questionnaire, which asked questions on the following issues:

1. General family reading behaviours
2. Family enjoyment and usage of the Bookstart Treasure programme
3. Demographic information (child gender, child age, and parent education level)

Practitioner Questionnaire

Practitioners in the 40 settings in the BELB received a questionnaire. The questionnaire asked questions on the following issues:

1. Implementation practices for the Bookstart Treasure programme
2. Staff Perceptions of the Bookstart Treasure programme
3. Staff views of the effects of the Bookstart Treasure programme on child outcomes
4. Staff views of effects of the Bookstart Treasure programme on parent outcomes
5. Staff experience (roles and years of practice)

² The first five questions in Section 1 were not answered by N=55 parents. This was due to parents not realising the questionnaire began on the back of the first page, and so missed these out by accident because the rest of the questions were answered.

Data Collection

Data collection was conducted by Booktrust. They provided the research team with an anonymised data set at the end of the survey for independent analysis and reporting. QUB provided a protocol to Booktrust for administering the questionnaires in settings to ensure standardized administration.

Analysis

Research questions 1, 2, 3 & 4 were explored using descriptive statistics:

1. What were family's general reading behaviours with their pre-school child?
2. What were the family's enjoyment and usage of the Bookstart Treasure programme?
3. What were practitioners' implementation practices and perceptions of the Bookstart Treasure programme?
4. What were practitioners' views on programme outcomes?

Research question 5 was investigated using t-tests:

5. Did implementation practices and staff perceptions vary across setting type (statutory vs voluntary)?

Research question 6 was explored using linear regression models³ while controlling for several variables⁴:

6. Did implementation practice have an impact on family enjoyment and usage of the Bookstart Treasure programme?

Ethics

All research was conducted according to the Queen's University Belfast School of Education Ethical Guidelines. Consent was obtained from the Ethics Committee before data collection is conducted. The research team produced a research information sheet for the study. Informed consent was obtained from participants by the return of their questionnaire. Once coded and entered onto a database by Booktrust, the data was anonymised and passed to QUB where it was held securely on a password-protected computer.

³ This analysis used regressions that included Robust Standard Errors to account for clustering of the data within pre-school settings.

⁴ Research question 6 required linking of practitioner and parent data.

Findings

Research Question 1: What are family's general reading behaviours with their pre-school child?

- 97.6% of the families read to their child weekly or daily

Table 1 shows some reasons preventing parents from reading with their child

Reason	Number (% of respondents)
The demands of other children get in the way	68 (17.8%)
I don't have enough time	63 (16.5%)
I get home from work too late	47 (12.3%)
I am too busy with household jobs	42 (11%)
My child prefers other entertainment (e.g. television)	39 (10.2%)
My partner likes to do the reading	32 (8.4%)
I don't have enough books	9 (2.4%)
My child finds reading boring	8 (2.1%)
I don't enjoy reading with my child	0 (0%)

Key points from Table 1:

- There was no dominant reason that prevented parents reading to their children.
- Time constraints/life demands are the most prominent reasons but were still reported by less than 20% of parents.

Research Question 2: What is the level of family enjoyment and usage of the Bookstart Treasure programme?

- Of the 310 families responding: 298 used the pack (96.1%); 12 did not use the pack (3.9%)⁵
- 93.6% of families reported using the packs 'sometimes' or 'often'
- 35% were not members of the library and 58.4% already were
- 75.4% of families reported that the 'Share the Fun' information booklet was either 'useful' or 'very useful'

Table 2 shows parental attitudes towards the Bookstart Treasure packs.

Question	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree
My child enjoyed using the Treasure pack.	1 (0.3%)	2 (0.5%)	7 (1.9%)	177 (47.3%)	187 (50.0%)
I think it is a good idea to provide the Treasure pack to all families with children in pre-school settings.	1 (0.3%)	0 (0.0%)	1 (0.3%)	129 (33.8%)	243 (65%)
I enjoyed using the Treasure Pack.	2 (0.5%)	0 (0.0%)	15 (4.0%)	209 (55.9%)	148 (39.6%)
The books included in the Treasure pack were just right for my child.	1 (0.3%)	7 (1.9%)	23 (6.2%)	222 (59.8%)	118 (31.8%)
The Treasure pack encouraged me to read with my child more often.	5 (1.3%)	57 (15.4%)	29 (7.6%)	200 (53.9%)	80 (21.6%)
We explored the Treasure pack books through talking and/or using other resources.	3 (0.8%)	19 (5.2%)	25 (6.8%)	237 (64.4%)	84 (22.8%)
The Treasure pack has helped me to bond with my child.	21 (5.7%)	66 (17.9%)	37 (10.0%)	165 (44.7%)	80 (21.7%)
The Treasure pack has improved communication about reading between me and my child's nursery, playgroup or children's centre.	6 (1.6%)	48 (12.9%)	108 (29.1%)	156 (42%)	53 (14.3%)
I am more confident about reading with my child since receiving the Treasure pack.	22 (5.9%)	120 (32.3%)	61 (16.4%)	117 (31.5%)	51 (13.7%)
I know more about how to read with my child since receiving the Treasure pack.	23 (6.1%)	110 (29.4%)	55 (14.7%)	143 (38.2%)	43 (11.5%)
The Treasure pack helped improve my child's language skills.	9 (2.4%)	61 (16.4%)	129 (34.7%)	136 (36.6%)	37 (9.9%)

Key points from Table 2:

- 97.3% of children and 85.5% of parents enjoyed using the Treasure packs
- 75.5% of parents agreed or strongly agreed that the Treasure Pack encouraged them to read with their child more often
- 49.7% of parents know more about how to read with their child since receiving the Treasure Pack
- 87.2% of families explored the Treasure Pack books through talking and/or using other resources

⁵ There were 72 missing responses to this question

Research Question 3a: What are practitioners' implementation practices of the Bookstart Treasure programme?

Table 3 shows how settings gifted the Treasure Pack.

Activity	Number (% of respondents)
We asked the children to use the Treasure Packs with their parents	63(79.7%)
We give information about joining the library to parents	58(73.4%)
We talk about the benefits of sharing books to parents	56(71.8%)
We give tips to parents about how and when to share books	48(64.0%)
We demonstrate how to use the Treasure Pack contents to children	47(60.3%)
We talk to the parents about how the Treasure Pack might be used	42(54.5%)
We used the Treasure Packs in class as well as sending them home	34(45.3%)
We simply gave the Treasure Packs to children to take home with them	30(40.5%)
We demonstrate how to use the Treasure Pack contents to parents	24(31.6%)
We gifted the Treasure Packs at an event for the children <u>only</u>	22(28.9%)
We gave the Treasure Packs to parents as they arrived to collect their child	21(26.9%)
We give out the Treasure Pack with no specific information or guidance	20(26.7%)
We gifted the Treasure Packs at an event for the children <u>and</u> their parents	19(26.4%)

Key Points Table 3:

- 71.8% of setting staff talked to parents about the benefits of sharing books with their child
- 40.5% of settings simply gave pack to children to take home
- 26.7% of setting staff gave out the pack with no specific guidance

Research Question 3b: What are practitioners' perceptions of the Bookstart Treasure programme?

Table 4 shows perceptions of setting staff towards implementing Bookstart Treasure.

Question	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
I am glad that my pre-school gifts the pack	2(2.4%)	0(0.0%)	0(0.0%)	5(6.2%)	75(91.5%)
I feel the pack is very beneficial for the children	2(2.4%)	0(0.0%)	1(1.2%)	6(7.3%)	73(89.0%)
I feel I am suitably qualified to gift this pack to the children	0(0.0%)	0(0.0%)	7(8.6%)	2(2.5%)	72(88.9%)
I would be happy for this pre-school to continue with this pack in subsequent years	2(2.5%)	0(0.0%)	4(4.9%)	4(4.9%)	71(87.7%)
The senior management in my setting are glad we gift the pack	2(2.5%)	0(0.0%)	6(7.5%)	7(8.8%)	65(81.3%)
The pack materials and resources are useful	1(1.2%)	1(1.2%)	1(1.2%)	14(17.3%)	64(79.0%)
I am confident in my delivery of the pack	0(0.0%)	0(0.0%)	7(8.5%)	15(18.3%)	60(73.2%)
I feel the pack is an important addition to the provision in this pre-school	2(2.5%)	0(0.0%)	6(7.4%)	14(17.3%)	59(72.8%)
The pack complements the existing curriculum/programme of work	2(2.4%)	1(1.2%)	13(15.9%)	11(13.4%)	55(67.1%)
The pack is suitable for all children regardless of stage of development	2(2.5%)	4(5.1%)	6(7.6%)	20(25.3%)	47(59.5%)
I feel engaged when gifting the pack	2(2.5%)	6(7.4%)	11(13.6%)	14(17.3%)	48(59.3%)
I don't feel this type of pack is necessary	58(72.5%)	8(10.0%)	4(5.0%)	5(6.3%)	5(6.3%)
There is not sufficient support in the ongoing delivery of the pack	20(25.0%)	20(25.0%)	21(26.3%)	14(17.5%)	5(6.3%)
The working environment in my pre-school is not suitable for the delivery of this pack	65(80.2%)	11(13.6%)	4(4.9%)	0(0.0%)	1(1.2%)

Key Points from Table 4:

- 91.5% of staff are glad they gift the pack
- 89.0% think the packs are beneficial for children
- 87.7% of pre-school staff want the programme to continue in the future

Research Question 4a: What are practitioners' views on programme outcomes for children?

Table 5 shows pre-school staff members perceptions of the potential child outcomes linked to Bookstart Treasure.

Question	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
The pack has exposed children to books in a fun and creative way	1(1.3%)	1(1.3%)	6(7.3%)	11(13.8%)	61(76.3%)
Promotes equality of access to reading and literacy	2(2.5%)	1(1.2%)	8(9.9%)	15(18.5%)	55(67.9%)
The pack has promoted the development of speech and language skills	0(0.0%)	1(1.3%)	14(17.7%)	18(22.8%)	46(58.2%)
The pack has increased children's enjoyment of books	0(0.0%)	0(0.0%)	17(21.3%)	17(21.3%)	46(57.5%)
The pack has promoted the development of fine motor skills via book handling	0(0.0%)	2(2.5%)	16(20.0%)	19(23.8%)	43(53.8%)
Helps to encourage library membership	2(2.5%)	3(3.7%)	15(18.5%)	19(23.5%)	42(51.9%)
The pack has increased children's interest in books	1(1.3%)	1(1.3%)	16(20.0%)	24(30.0%)	38(47.5%)
The pack has promoted secure bonding between parents and children	1(1.3%)	0(0.0%)	33(41.3%)	11(13.8%)	35(43.8%)
The pack has encouraged mark making and writing	1(1.3%)	2(2.5%)	18(22.5%)	14(17.5%)	45(43.8%)
The pack has supported good mental health and wellbeing	0(0.0%)	2(2.5%)	38(48.1%)	7(8.9%)	32(40.5%)
Helps to identify literacy issues	3(3.7%)	9(11.1%)	28(34.6%)	11(13.6%)	30(37.0%)
The pack has helped to increase school readiness	1(1.2%)	3(3.8%)	27(34.2%)	24(30.4%)	24(30.4%)

Key Points Table 5:

- The main perceived outcome of the Bookstart Treasure is children being exposed to books in a fun and creative way (76.3% strongly agree)
- 86.4% of pre-school staff thought Bookstart Treasure helped promote equality of access to reading and literacy
- There is relatively more uncertainty about the packs impact on bonding and wellbeing

Research Question 4b: What are practitioners' views on programme outcomes for parents?

Table 6 shows pre-school staff members perceptions of the potential parent outcomes linked to Bookstart Treasure:

Question	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
The Treasure Pack provided a fun way for the parent/carer to engage with their child	0(0.0%)	0(0.0%)	10(12.5%)	18(22.5%)	52(65.0%)
The Treasure Pack increased access to books	0(0.0%)	0(0.0%)	13(16.3%)	18(22.5%)	49(61.3%)
The Treasure Pack increased the parent/carer's awareness of their child's enjoyment of books	0(0.0%)	1(1.3%)	17(21.3%)	17(21.3%)	45(56.3%)
Encourages parental engagement with reading and literacy	0(0.0%)	2(2.5%)	4(12.3%)	25(30.9%)	44(54.3%)
The Treasure Pack promoted shared reading as part of a daily routine	0(0.0%)	3(3.8%)	21(26.3%)	17(21.3%)	39(48.8%)
The Treasure Pack established the role of the parent/carer as the first educator of their child	2(2.5%)	3(3.8%)	23(29.1%)	16(20.3%)	35(44.3%)
The Treasure Pack increased parental confidence to share books with their child	0(0.0%)	0(0.0%)	34(42.5%)	16(20.0%)	30(37.5%)
The Treasure Pack positively changed the parent/carer's attitudes to books	2(2.5%)	3(3.8%)	38(47.5%)	18(22.5%)	19(23.8%)

Key Points Table 6:

- 87.5% of pre-school staff agreed that the Treasure Pack provided a fun way for the parent/carer to engage with their child
- 83.8% of pre-school staff agreed that the Treasure Pack increased access to books

Research Question 5a: Do implementation practices vary across setting type (statutory vs voluntary)?

An 'implementation practice' score was calculated using 'good' and 'non-ideal' implementation practices (scores on the non-ideal practice were reversed).

Table 7 shows the practices explored during implementation.

Practice	Scoring (- indicates reversed item)
We gifted the Treasure Packs at an event for the children <u>and</u> their parents	+
We asked the children to use the Treasure Packs with their parents	+
We used the Treasure Packs in class as well as sending them home	+
We talk to the parents about how the Treasure Pack might be used	+
We demonstrate how to use the Treasure Pack contents to children	+
We demonstrate how to use the Treasure Pack contents to parents	+
We talk about the benefits of sharing books to parents	+
We give out the Treasure Pack with no specific information or guidance	-
We give tips to parents about how and when to share books	+
We give information about joining the library to parents	+

The final reliability of the 'implementation practice' scale was .75 which is considered good in measurement terms. A final score was then produced by totalling the remaining ten items in the revised scale⁶.

An independent-samples t-test was conducted to compare 'implementation practice' between voluntary and statutory pre-schools. There was no significant difference in the scores for voluntary (M=5.7, SD=2.9) and statutory (M=5.5, SD=2.4) conditions ($t_{61} = 0.22$, $p = 0.83$). These results suggest that there was no difference in 'implementation practice' between voluntary and statutory nursery's for the Bookstart Treasure programme.

⁶ The reliability analysis suggested removing some items from the original questionnaire.

Research Question 5b: Do staff perceptions vary across setting type (statutory vs voluntary)?

A 'programme perceptions' score was calculated using positive and negative perceptions as follows:

Table 8 shows the practitioner perceptions of Bookstart Treasure that were explored.

Perception	Scoring (- indicates reversed item)
I feel I am suitably qualified to gift this pack to the children	+
I am glad that my pre-school gifts the pack	+
The pack complements the existing curriculum/programme of work	+
The pack materials and resources are useful	+
I am confident in my delivery of the pack	+
There is not sufficient support in the ongoing delivery of the pack	-
I feel the pack is very beneficial for the children	+
The working environment in my pre-school is not suitable for the delivery of this pack	-
The senior management in my setting are glad we gift the pack	+
I feel engaged when gifting the pack	+
I feel the pack is an important addition to the provision in this pre-school	+
I would be happy for this pre-school to continue with this pack in subsequent years	+

The final reliability of the 'implementation perceptions' scale was .93 which is considered excellent in measurement terms⁷. A final score was then produced by totalling the remaining twelve items in the revised scale. There is some indication that the scores on this scale were skewed towards high scores with an overall mean of 4.6 out of 5. In other words, in general staff had very positive perceptions of the Bookstart Treasure programme.

An independent-samples t-test was conducted to compare implementation perceptions between voluntary and statutory pre-schools. There was no significant difference in the scores for voluntary (M=4.6, SD=0.4) and statutory (M=4.6, SD=0.8) conditions ($t_{72} = 0.2$, $p = 0.84$). These results suggest that there is no difference in implementation perceptions between voluntary and statutory nursery's for the Bookstart Treasure programme.

⁷ The reliability analysis suggested removing some items from the original questionnaire.

Research Question 6: Does implementation practice have an impact on family enjoyment and usage of the Bookstart Treasure programme?

The following section explores the relationship between implementation and outcomes. This involves linking the data from practitioners' implementation scores to family outcomes. The implementation practice scores from pre-school staff were added to the parent database⁸ and related to family outcomes in terms of their enjoyment and usage of the Bookstart Treasure programme.

The analysis showed that there was a small but statistically significant positive correlation ($r = .20, p < .001$)⁹ between implementation and enjoyment and usage of the packs¹⁰. These results show that implementation practices were associated with programme outcomes. In other words, higher quality implementation tended to be associated with increased overall family enjoyment and usage of the Bookstart Treasure programme. It is important, however, to note that such associations cannot in themselves be treated as evidence of causality. In particular, it cannot be concluded from this that higher levels of implementation directly leads to increases in family enjoyment and usage of the programme.

The analysis also suggested that there was a relationship between parental levels of education and enjoyment and usage of the packs. Parents with lower levels of education reported enjoying and using the packs more than those with higher levels of education. This was the case regardless of their child's gender, what type of setting the packs were gifted in, and even how well the programme was implemented.

⁸ A mean implementation score was calculated from all those staff that completed a questionnaire. This was linked all the parents in the setting these staff worked in. As there were occasional missing responses from staff on some items, missing data modelling was undertaken using an EM algorithm in order to include available data.

⁹ This is based on a linear regression, with robust standard errors (Coeff = .2029662, Robust SE = .0546708, $p > 0.01$). Setting type (voluntary or statutory), child gender, child age and parental level of education were also included in the model to control for the influence of these factors.

¹⁰ This is an overall score produced from the 11 items in Table 2. Reliability analysis shows an Alpha score of 0.88 (one item was removed because of poor reliability).

Conclusions

This investigation confirms the findings of previous studies that, Booktrust programmes are greatly enjoyed by families as well as being widely utilised in the home. The findings also reveal strong perceptions from practitioners that the intervention is having a positive effect on a wide range of family reading outcomes. Such perceptions are an important finding in themselves in relation to confirming the successful implementation of the programme. However, it is important to note that they do not, in themselves, constitute evidence that the programme is actually having an effect on family reading outcomes. Unfortunately, it was not possible to ascertain this from the present study design.

With regard to delivery, the programme is equally well delivered in both voluntary and statutory settings. There is also some evidence that higher quality programme implementation is associated with increased enjoyment and usage of the packs amongst families. With that said, this study is not a randomised controlled trial and therefore it is not possible to make any definitive statements about the effectiveness of the programme. However, this finding is encouraging and does suggest a relationship between how well the programme is delivered and improved parent reported outcomes. Furthermore, the findings also provide some evidence that parents with lower levels of education enjoy and use the packs more than their counterparts with higher levels of education.

Recommendations

- Booktrust should provide implementation guidelines, based on best practice, to the practitioners in early year's settings when distributing the packs. This could improve and standardise the quality of implementation, which has been shown to be related to parents' enjoyment and usage of the packs.
- Booktrust should explore the relationship between low parental levels of education and the increased enjoyment and usage of the programme. There may be opportunity to use the programme as a catalyst for engaging parents with low levels of education in their child's education.

References

Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on Social Work Practice*, 19(5), 531-540.

O'Hare, L., & Connolly, P. (2014). A cluster randomised controlled trial of "Bookstart+": a book gifting programme. *Journal of Children's Services*, 9(1), 18-30.